

TRENDS IN HIGHWAY FINANCE*

HIghway construction and maintenance is a leading function of state and local government in Michigan, ranking second only to education in fiscal importance. Since 1932, the amount spent on Michigan highways and streets has averaged about \$51 million annually, as compared with an average of \$88 million per year between 1922 and 1931.

The manner of raising and spending the highway money has changed considerably in the past fifteen years, and this has resulted in a redistribution of the tax burden between automobile and property owners. With highway expenditures in Michigan now being financed chiefly by motorists, the question arises as to whether or not most of the motor vehicle tax proceeds should be spent on roads according to their importance in accommodating automobile traffic. If expenditures are made on this basis, it will be necessary to co-ordinate highway expenditures, taxation, and road use. Consideration of highway finance along these lines brings out some of the most important trends in recent years. In this pamphlet, the discussion is divided into two parts: (1) character of Michigan highway systems; and (2) development of highway fiscal policy between 1922 and 1937.

CHARACTER OF MICHIGAN HIGHWAY SYSTEMS

Public highways are usually classified into two broad groups, motor vehicle highways and land utilization roads. Roads in the first group are used primarily by motorists and are best illustrated by the state trunklines. The second group of roads, consisting mainly of residential city streets and local

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TRENDS IN HIGHWAY FINANCE

rural roads, was laid out primarily to provide access to land, and consequently is of direct benefit to property owners. Obviously, all roads cannot be placed in one or the other of these two categories, for there are many roads, such as the county roads, that serve both motorists and property owners. Nevertheless, the classification is useful in a study of highway finance.

At the present time there are in Michigan three separate systems of highways: (1) county roads, (2) state trunklines, and (3) city streets. Each of these systems has a different legal basis; each offers a different combination of highway services; and each has a different means of financial support.

COUNTY ROAD SYSTEM

Development

The county road system is an outgrowth of the township highway system, which was established in 1805 under the Michigan territorial government. Township roads were constructed and maintained under the direction of township highway commissioners and were at first financed by a township property tax levy and by the sale of township highway bonds. In 1893 the legislature made provision for a system of county roads which were to be selected from the township roads and developed by a county road commission in each county, with the financial support of a county-wide property tax levy and county road bond issues. City streets could be included in the county road system with the permission of city authorities. Only a small portion of the total street mileage was actually taken into the county system. Although it was optional for counties to adopt a county road system, all but one county had done so by 1920.

Until 1931 the county and township systems existed independently, with each having control over a separate network of roads. In that year the two systems were consolidated under the McNitt-Holbeck-Smith Act. This act directed the counties to

TRENDS IN HIGHWAY FINANCE

take over the township roads at the rate of one-fifth of the total mileage annually during the five years from 1932 to 1936. It also provided that in 1937 the counties were to take into their road systems the "dedicated" streets and alleys in recorded subdivision plats lying outside the limits of incorporated cities and villages. An amendment enacted in 1939 stipulated that the road mileage incorporated into the county system under the McNitt Act is to include only "roads in actual use for public travel at least three months each year." To assist the counties in assuming the additional highway burden, the legislature appropriated from the proceeds of the gasoline tax, \$2,000,000 for the year 1932, \$2,500,000 for 1933, \$3,000,000 for 1934, \$3,500,000 for 1935, and \$4,000,000 for the year 1936 and each year thereafter. If additional funds are needed for the proper maintenance and improvement of township roads, the money may be provided from county road funds, or from the proceeds of a limited property tax levied in the townships for this purpose. The township roads are now referred to as McNitt roads.

Mileage and Use

There are now 82,012 miles of road in the county system, which includes approximately 17,301 miles of county roads and 64,711 miles of township roads. These two components of the county road system have different functions. The county roads, sometimes called secondary roads, serve both motorists and adjoining property. Such roads represent 16 per cent of the total road and street mileage in Michigan. According to the highway planning survey made jointly by the Michigan State Highway Department and the United States Bureau of Public Roads, the county roads carry about 10 per cent of the total motor vehicle traffic in the state; this includes the traffic on city streets which have been made part of the county road system.

The township roads, sometimes designated as tertiary roads, embrace 62 per cent of the road and street mileage, but serve only 7 per cent of the traffic. The principal function of

TRENDS IN HIGHWAY FINANCE

these roads would seem to be the provision of access to property.

In general, county roads are more highly improved than township roads. Of the county mileage 98 per cent is surfaced—most commonly with gravel. Only 28 per cent of the mileage of township roads is surfaced. These figures represent the average for the state as a whole, and do not apply to any particular county.

STATE TRUNKLINE SYSTEM

Development

The state trunkline system in Michigan was developed originally from township and county roads. In 1905 the state instituted a plan of rewards to townships and counties for road building, which was to be carried out under state specifications with the supervision of the state highway commissioner. In 1913 the legislature recognized that if the state was to participate in the cost of road building, at least part of its funds should be spent on a selected network of roads connecting important centers of population. Accordingly, certain roads were selected and designated by the legislature as state trunkline roads. Double rewards were made available by the state for construction on these roads, for it was anticipated that they would carry a heavier volume of traffic and would therefore need to be more highly improved than other roads.

Federal aid was inaugurated in 1917, as a means of assisting in the development of the various state highway systems. In 1919 the state assumed the responsibility for constructing state trunkline and federal aid roads, but the local units were required to furnish part of the funds needed for such construction. The state, in 1925, undertook the full financial responsibility for rural trunklines and increased its participation in financing the development of urban trunklines, that is, the portion of state trunklines located within cities. The Dykstra Act of 1931 extended the state's financial responsibility for urban portions of trunkline roads.

TRENDS IN HIGHWAY FINANCE

Mileage and Use

At present there are 9,457 miles of state trunkline, or primary, roads in Michigan. This is 9 per cent of the total road and street mileage in the state. According to data from the highway planning survey, 61 per cent of the total motor vehicle travel in Michigan is on the state trunklines—34 per cent on rural trunklines, and 27 per cent on urban trunklines.

These roads must be of a durable type of construction because they accommodate a large volume of automobile, bus, and truck traffic. The mileage in the trunkline system in Michigan is 96 per cent surfaced. Nearly one-half of this surfaced mileage is graveled, and slightly more than one-half is paved; but this does not reveal the great difference in road types. In rural areas some trunklines have a gravel road with a construction cost of \$10,000 per mile; others have a forty-foot concrete pavement that costs about \$80,000 per mile, including right of way. The standard concrete road is about twenty-two feet wide and costs about \$40,000 per mile, including grading, structures, and right of way.

The latest development in trunkline roads is the divided highway, which materially reduces accident hazards by interposing a strip of parkway between traffic moving in opposite directions. This type of road, however, is expensive to construct, for it requires extensive grading operations and a wide right of way. Special structures are necessary for the elimination of grade crossings with railroads and other highways. The cost of divided highways, including right of way, runs as high as \$300,000 per mile in rural areas, and in urban areas the cost is much higher.

CITY STREETS

Cities are given broad powers in the Michigan constitution and statutes for street construction and improvement, although they are limited to some extent by the state's control over improvement and widening of urban trunklines.

TRENDS IN HIGHWAY FINANCE

There are 13,456 miles of city streets in Michigan, which represent 13 per cent of the total road and street mileage in the state. The highway planning survey has found that the total mileage of city streets carries 49 per cent of the total motor vehicle traffic in the state. As indicated above, 27 per cent of the total state traffic is found on urban state trunklines; this leaves 22 per cent of the total traffic on the nontrunk-line city streets.

City streets are of direct benefit to property owners and motorists. Accordingly, street types range from the narrow, unpaved or lightly-paved residential street to arterial thoroughfares. In order to accommodate motor vehicle traffic, cities must provide various street facilities. Any street that carries a large volume of traffic must be well paved, and the streets that are used by the heaviest trucks and busses must have a thicker pavement than those used only by light vehicles. With the increase in motor vehicle traffic it has been necessary to widen certain important streets. This is an expensive undertaking, because the acquisition of additional right of way often requires the purchase of business frontage and the re-location of buildings. The cities must also make expenditures for tunnels and viaducts, traffic control, and street lighting. The financial burden of traffic control has not received much attention because of the difficulty of segregating traffic control costs from general police costs.

DEVELOPMENT OF HIGHWAY FISCAL POLICY

Prior to 1915, when the volume of automobile traffic was small, it was customary to finance highway construction from the general property tax. Special taxation according to direct benefits derived from highway improvements was confined to special assessments for city streets.

With the development of the automobile a new type of highway demand was created. In rural and urban areas the demand arose for a durable, dustless road wherever there was

TRENDS IN HIGHWAY FINANCE

a heavy volume of motor vehicle traffic. To provide funds for meeting this new demand for highway expenditures, resort was made to special taxation of motorists. This new policy of highway finance may be designated as a commercial policy. It is based on the proposition that highway expenditures for the direct benefit of motorists and property owners should be financed by special taxes levied on these people in an amount equal to the highway expenditures incurred on their behalf.

Authorities in the field of highway finance claim that if highway expenditures are restricted to the level necessary to meet the demands of these two groups, highway facilities will usually be adequate also to meet the several needs of the community for fire protection, public schools, and other functions of a general welfare character. But if the highway needs of the community are not sufficiently met as a by-product of meeting the highway needs of motorists and property owners, then resort may be made to general taxation.

The extent to which highway costs should be financed from special motor vehicle taxes and general taxes is a controversial question. There are two extreme positions on this question, namely, to finance such costs entirely from general taxation or entirely from special taxation of motorists. As mentioned previously, it was the early policy in the American states to finance highways from general taxation. No state goes to the other extreme of financing highway construction and maintenance entirely from motor vehicle taxes, although Michigan policy is not far removed from that point, as indicated by a property tax levy for highway purposes of only \$3 million in 1937. Throughout the United States there has been a decreasing reliance on property tax levies, not only for main roads but for rural roads as well. In Michigan the reduction in property tax support for local roads has been "spectacular," according to the Highway Research Board of Washington, D.C.

The existing arrangement for financing highways in Michigan is much different from that which was in effect before

TRENDS IN HIGHWAY FINANCE

1932. For this reason the treatment of the financial development is divided into the periods 1922-31 and 1932-37. It is desirable to consider both periods because some of the features of the present policy are an outgrowth of conditions existent during the previous ten years.

THE 1922-31 PERIOD

Expenditures

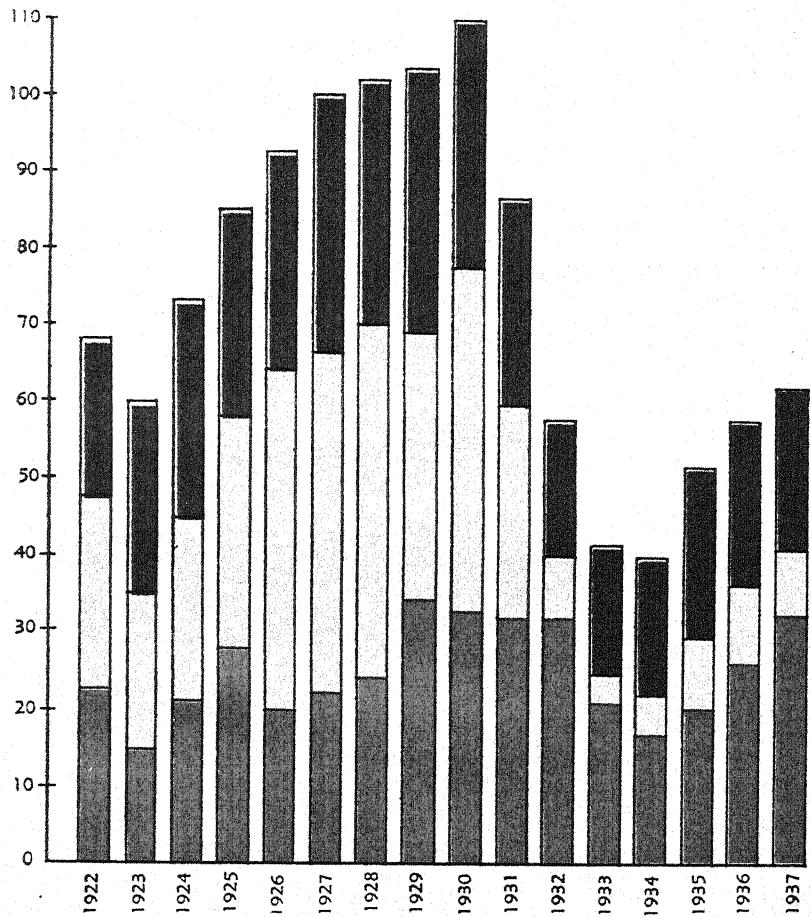
Highway expenditures by the various units of government in Michigan for 1922-31 are summarized in Table I. In 1922 the state spent \$23 million, the cities and villages spent \$23 million, and the counties and townships combined spent \$21 million. Total expenditures on the three highway systems in that year amounted to \$68 million. By 1930 these combined expenditures reached a peak of \$109 million. After 1930 total

TABLE I
HIGHWAY EXPENDITURES MADE BY THE VARIOUS UNITS OF GOVERNMENT
IN MICHIGAN 1922-31
(Millions of Dollars)

Year	Counties and Townships	Cities and Villages	State	Total
1922	\$ 21.4	\$ 23.4	\$ 23.4	\$ 68.2
1923	25.6	20.2	15.3	61.1
1924	27.5	24.5	21.0	73.0
1925	25.8	31.3	27.8	84.9
1926	28.3	43.7	19.8	91.8
1927	31.7	44.4	22.7	98.8
1928	31.3	46.1	23.7	101.1
1929	33.8	34.9	34.3	103.0
1930	31.7	44.3	33.1	109.1
1931	26.5	27.7	31.5	85.7
 Total for period	 \$283.6	 \$340.5	 \$252.6	 \$876.7
Annual average for period	\$ 28.4	\$ 34.0	\$ 25.3	\$ 87.7

TRENDS IN HIGHWAY FINANCE

MICHIGAN HIGHWAY EXPENDITURES 1922-1937



■ Counties and townships
Cities and villages
■ State

TRENDS IN HIGHWAY FINANCE

expenditures declined sharply, and it will be shown in a later section that by 1937 they were approximately the same as in 1923, which was the low point of the period 1922-31. In these ten years average annual expenditures amounted to \$88 million. Total expenditures were \$877 million. Cities and villages spent 39 per cent of this total, counties and townships spent 32 per cent, and the state spent 29 per cent.

Taxation and Federal Aid

Highway expenditures for the period 1922-31 were financed chiefly by the property tax, although the importance of the motor vehicle taxes increased after 1925. Motor vehicle taxes consist of the registration fee, or weight tax, which was first levied in 1915; the special registration fee levied on contract and common carriers, which was inaugurated in 1923; and the gasoline tax which was adopted in 1925. The tax levy on property for highway purposes included the following items: a small levy by the state for the first three years of the period, the county road tax, township highway tax, city highway tax, special assessments levied by the cities, and special assessments levied under the Covert Act by the counties, townships, and special assessment districts. Federal aid was granted to the state under an arrangement whereby these funds were spent on projects approved by the Federal Government; at least one-half of the cost of such projects was paid by the state to match federal contributions.

The amounts of highway taxes and federal aid for the period are shown in Table II. Although motor vehicle taxes were a small proportion of the total revenues at the beginning of the period, their yield grew more rapidly than that of the other two sources of revenue. For the period as a whole the sum of motor vehicle taxes, property tax, and federal aid was \$842 million. Of this total, the property tax and special assessments accounted for 66 per cent, motor vehicle taxes for 31 per cent, and federal aid for 3 per cent. The difference of \$35 million between total expenditures of \$877 million,

TRENDS IN HIGHWAY FINANCE

and total taxes and federal aid in the amount of \$842 million can be explained by the borrowing for highway purposes that occurred during this period.

TABLE II
HIGHWAY TAXES AND FEDERAL AID IN MICHIGAN
1922-31
(Millions of Dollars)

Year	Motor Vehicle Taxes	Property Tax	Federal Aid	Total
1922	\$ 7.1	\$ 42.8	\$ 1.0	\$ 50.9
1923	9.8	43.3	1.5	54.6
1924	11.7	46.6	2.3	60.6
1925	12.4	52.9	3.6	68.9
1926	26.2	65.8	2.8	94.8
1927	27.8	69.0	2.7	99.5
1928	35.3	69.6	2.4	107.3
1929	41.9	58.9	3.1	103.9
1930	44.3	66.6	2.3	113.2
1931	42.2	43.1	3.2	88.5
 Total for period	 \$258.7	 \$558.6	 \$24.9	 \$842.2
Annual average for period	\$ 25.9	\$ 55.9	\$ 2.5	\$ 84.2

The amount of borrowing that occurred each year is not known, but some information is available concerning total gross highway debt outstanding in 1933. A bond issue of \$50 million was floated by the state for the trunkline system, and most of the proceeds were spent between 1919 and 1925. In 1933 the gross highway debt of counties and townships was approximately \$74 million, one-half of which was incurred under the Covert Road Act. In addition, the gross highway debt of cities and villages in 1933 was \$18 million. Thus the total highway debt of counties, townships, cities, and villages in Michigan in 1933 was \$92 million, most of which was floated before 1931.

TRENDS IN HIGHWAY FINANCE

State Aid to Local Units

The growth of highway expenditures in Michigan was accompanied by an expansion in state payments to local units for highway support. It was mentioned previously that in 1905 the state adopted a system of rewards, or grants-in-aid, to local units for road construction that was carried out under specifications prescribed by the state. These grants were discontinued in 1929, although it took several years to complete the payments due at that time. For the entire period 1922-31 state rewards amounted to approximately \$15 million, and they were spent partly on county and township roads, and partly on state trunklines.

In those years the state also distributed \$67 million to the counties from the proceeds of the motor vehicle taxes. These annual allocations were earmarked for expenditure by the county road commissions.

Summary

Between 1922 and 1931 Michigan highway expenditures ranged from \$68 million to \$109 million per year. In these years the largest part of the burden of highway expenditure was financed by the taxation of property, although an increasing share of the total highway tax bill was collected from motorists.

THE 1932-37 PERIOD

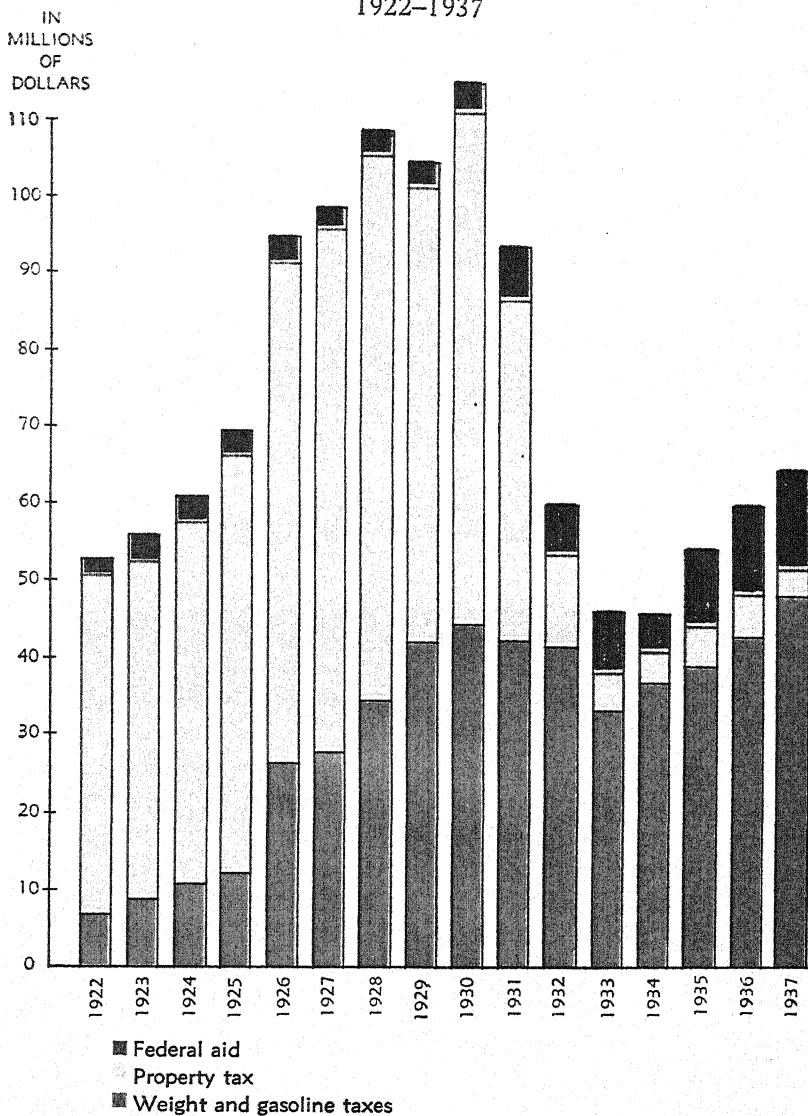
Expenditures

The greatest difference between this period and the preceding one is illustrated in the decline in average annual expenditures from approximately \$88 million to \$51 million. A comparison of Tables I and III will reveal that the decline occurred chiefly in expenditures by cities and villages, although there was some reduction in county and township expenditures. Average annual expenditures on state trunklines remained practically the same. Of the total amount of \$308 million

TRENDS IN HIGHWAY FINANCE

MICHIGAN HIGHWAY REVENUES

1922-1937



TRENDS IN HIGHWAY FINANCE

that was spent for highways in the six years from 1932 to 1937 inclusive, 49 per cent was spent on state trunklines, 37 per cent on county and McNitt roads, and 14 per cent on city streets.

TABLE III
HIGHWAY EXPENDITURES MADE BY THE VARIOUS UNITS OF GOVERNMENT
IN MICHIGAN 1932-37
(Millions of Dollars)

Year	Counties and Townships	Cities and Villages	State	Total
1932	\$ 17.1	\$ 8.3	\$ 31.7	\$ 57.1
1933	15.9	4.0	21.0	40.9
1934	18.1	4.6	17.6	40.3
1935	21.8	7.7	21.5	51.0
1936	20.7	10.1	25.8	56.6
1937	21.5	7.9	32.3	61.7
Total for period	<u>\$115.1</u>	<u>\$42.6</u>	<u>\$149.9</u>	<u>\$307.6</u>
Annual average for period	<u>\$ 19.2</u>	<u>\$ 7.1</u>	<u>\$ 25.0</u>	<u>\$ 51.2</u>

Taxation and Federal Aid

An important change in highway finance policy took place in this period, as motor vehicle taxes—automobile weight and gasoline taxes—became the leading source of revenue for highway support. During the previous period these two taxes accounted for 31 per cent of the total revenue from taxation and federal aid, but between 1932 and 1937 their yield increased to 74 per cent of the total revenue.

The rising importance of the motor vehicle taxes, as shown in Table IV, was largely the result of a decline in the property tax levy. The peak of this levy for highway purposes was reached in 1928 when it amounted to \$70 million. In 1932

TRENDS IN HIGHWAY FINANCE

it was \$12 million, and it declined to \$3 million in 1937. Although the rate of the automobile weight tax was lowered in 1934, an increase in the number of automobile registrations and in the gasoline consumption per car raised the yield of the weight and gasoline taxes to a new high point of \$48 million in 1937.

In this period the average annual amount of federal aid for Michigan highways was \$8 million, as compared with \$2.5 million in the previous period. It will be observed in Table IV that federal aid was more than \$10 million annually in each of the three years after 1934. This increase was caused by federal emergency relief grants to the state highway department for highway construction. In addition there were large expenditures on highway projects by the Works Progress Administration and the Public Works Administration after 1935.

TABLE IV
HIGHWAY TAXES AND FEDERAL AID IN MICHIGAN
1932-1937
(Millions of Dollars)

Year	Motor Vehicle Taxes	Property Tax	Federal Aid	Total
1932	\$ 41.5	\$ 11.7	\$ 6.6	\$ 59.8
1933	33.9	4.1	7.1	45.1
1934	36.4	3.2	4.6	44.2
1935	38.2	5.1	10.5	53.8
1936	42.5	5.9	11.0	59.4
1937	48.4	3.0	12.3	63.7
Total for period	\$240.9	\$33.0	\$52.1	\$326.0
Annual average for period	\$ 40.1	\$ 5.5	\$ 8.4	\$ 54.3

TRENDS IN HIGHWAY FINANCE

State Aid to Local Units

The plan of state aid to local units was altered considerably in these years by the enactment of the McNitt Act in 1931 and the Horton Act in 1932. Under these two laws there was an increase in the amount of motor vehicle taxes that was returned to local units of government by the state. According to the McNitt Act \$4 million from the gasoline tax proceeds are distributed annually to the counties for the maintenance of McNitt roads. Under the Horton Act the entire proceeds of the weight tax and \$2,550,000 from the gasoline tax collections are distributed among the counties. One-half of the money allotted under the Horton Act is spent on county roads, including McNitt roads, and the other half is apportioned for specific purposes in the following order of priority:

1. Covert road debt relief.
2. County road debt relief.
3. Township road debt relief.
4. Of any remaining funds, an amount up to 50 per cent may be allotted for maintenance of additional McNitt roads. If the County Board of Supervisors fails to vote funds for such roads, the funds become available in part for city streets according to priority five.
5. The balance, if any, is to be divided between the counties and the villages on a pro rata basis according to population.

It will be observed that the first three priorities are devoted to retirement of the local highway debt. The amounts allotted in 1937 for these five priorities are shown in Table V.

It is evident that the chief purposes of the McNitt and Horton acts were to facilitate the consolidation of the county and township road systems, and to assist the local units in meeting payments of principal and interest on highway debt. At the time of the adoption of that legislation the local units were unable to meet their debt service requirements from the property tax levy because of the decline in assessed valuation of

TRENDS IN HIGHWAY FINANCE

taxable property, the 15-mill property tax rate limitation, and the large volume of property tax delinquency.

TABLE V

DISPOSITION OF AUTOMOBILE WEIGHT AND GASOLINE TAX REVENUES
ALLOTTED TO LOCAL UNITS IN 1937

County and McNitt roads	\$17,260,378.84
Debt relief:	
Covert road assessments	\$2,426,444.57
County road debt service	724,628.69
Township highway debt service	<u>201,420.35</u>
Total debt relief	3,352,493.61
Cities	<u>5,539,827.04</u>
Total to local units	\$26,152,699.49
Amount retained by state	<u>22,231,180.34</u>
Total motor vehicle taxes	\$48,383,879.83

*Relation Between Highway Expenditures, Taxation,
and Road Use*

Under the present policy of highway finance in Michigan the proceeds of motor vehicle taxes might be spent on each class of road roughly in proportion to the traffic accommodated, for the following reasons: (1) most of the present expenditures for highway construction and maintenance are financed from the proceeds of motor vehicle taxation; (2) higher registration fees are imposed on the heaviest trucks and busses because they require thicker and more expensive pavements; and (3) the concentration of traffic on state trunkline roads and arterial nontrunkline city streets necessitates relatively large expenditures per mile on these thoroughfares.

A comparison between the expenditure arrangement in 1937 and that which would be established if motor vehicle tax proceeds were spent on each class of road in proportion to traffic is made in Table VI. The distribution of expenditures in 1937 appears in the first column of that table. In that year 53 per

TRENDS IN HIGHWAY FINANCE

cent of the entire proceeds of the motor vehicle taxes was spent for rural and urban state trunklines; 42 per cent was spent for the county road system (35 per cent for county roads, and 7 per cent for highway debt service); and 5 per cent for nontrunkline city streets. The amount spent on nontrunkline city streets cannot be determined precisely, but it was estimated at 5 per cent of the total motor vehicle tax proceeds. Such an estimate does not appear to be unreasonable. Although the cities received 11 per cent of the total motor vehicle tax proceeds in 1937, they were required to use this money in meeting the costs of trunkline street maintenance and construction; these costs in the larger cities were large enough to absorb their entire allotments. Since 1937 the distribution of expenditures among the three road systems has changed as a result of decreasing requirements for debt service. With the retirement of local highway debt and the elimination of the first three priorities under the Horton Act, more funds will become available for expenditure on city streets.

TABLE VI

EXPENDITURES OF MOTOR VEHICLE TAX REVENUES AND ROAD USE

Road System	Per Cent of All Motor Vehicle Tax Revenues Expended in 1937	Per Cent of Total State Traffic as Reported by the Michigan Highway Planning Survey for the Year 1936
Rural and urban state trunklines	53	61
County road system	42	17
Nontrunkline city streets	5	22
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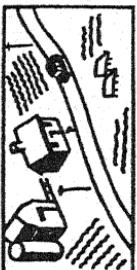
Whether or not there should be rigid adherence to a commercial policy is debatable. The implications of such a policy, however, are shown in the second column of Table VI, which indicates the proportion of total motor vehicle traffic on each

MICHIGAN ROAD SYSTEMS

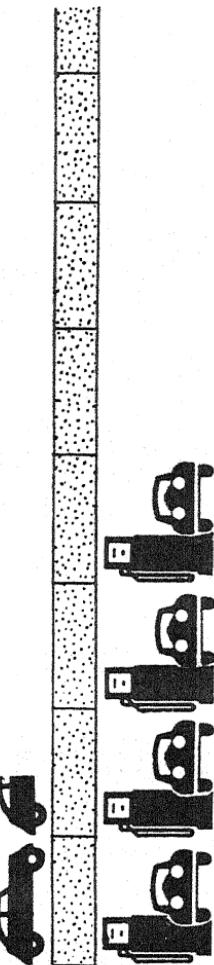
Traffic, Mileage, and Expenditures of Motor Vehicle Taxes—1937



STATE TRUNKLINES



COUNTY ROADS



NONTRUNKLINE
CITY STREETS

Symbols by Pictorial Statistics, Inc., New York

Each car represents 10 per cent of total state traffic.

Each rectangle represents 10 per cent of total state mileage.

Each gasoline tank and car represents 10 per cent of expenditures of motor vehicle taxes.

TRENDS IN HIGHWAY FINANCE

of the three road systems as reported by the Michigan highway planning survey. Of the total traffic, 61 per cent was accommodated on rural and urban state trunkline highways, and that percentage of total expenditures would be made on the trunklines under a commercial policy. County roads accommodated 17 per cent of total traffic, and they would be entitled to that proportion of total expenditures. Similarly, expenditures on nontrunkline city streets would be 22 per cent of the state total according to their percentage of total traffic.

CONCLUSIONS

Since 1922 there has been a trend toward the adoption of the commercial policy of highway finance in Michigan. This trend was accelerated by the McNitt and Horton acts, and the point has now been reached where motor vehicle taxes constitute the principal means of highway support. There has been virtually a complete abandonment of the property tax for rural roads, and a material reduction in this levy for city streets. By a drastic revision of the system of state payments to local units of government from the proceeds of motor vehicle taxes, the property tax levy for county and township roads has been replaced by motor vehicle taxes.

The existing arrangement for spending motor vehicle tax revenues is not wholly consistent with the present policy of taxing motorists. If the road use data of the highway planning survey are accepted as indicative of the distribution of travel on the various classes of roads, it would seem that in 1937 too much of the motor vehicle tax revenue was being spent on county roads and not enough of this revenue was being spent on nontrunkline city streets and on rural and urban trunklines. It should be recognized, however, that the allocation of motor vehicle tax proceeds is changing under the operation of the present legislation, and as the local highway debt is retired more funds will become available for expenditure on city streets. Any change in present highway policy would therefore be hazardous without careful consideration of all factors affecting the problem.

UNIVERSITY OF MICHIGAN
BUREAU OF GOVERNMENT

NEW SERIES BULLETINS

A series of eight bulletins published between 1932 and 1937. List may be obtained from the Bureau of Government.

MICHIGAN GOVERNMENTAL STUDIES

1. The State Administrative Board in Michigan, by George C. S. Benson and Edward H. Litchfield (1938). x + 107 pp. \$.50.
2. The Taxation of Intangibles in Michigan, by Robert S. Ford and William B. Wood (1939). ix + 156 pp. \$.75.
3. Voting Behavior: A Case Study, by James K. Pollock (1939). 40 pp. \$.25.

MICHIGAN PAMPHLETS

1. Taxing Intangibles—The Problem and Methods, by Robert S. Ford and William B. Wood (1939). 13 pp. \$.10.
2. Financing Michigan's Government: 1930-1938, by Robert S. Ford (1939). 26 pp. \$.10.
3. Property Tax Administration, by Robert S. Ford and Frank M. Landers (1939). 21 pp. \$.10.
4. Tax and Salvage Sales, by Robert S. Ford and William B. Wood (1939). 24 pp. \$.10.
5. Trends in Highway Finance, by Robert S. Ford and Marvin A. Bacon (1940). 20 pp. \$.10.

*Copies may be obtained from the University of Michigan Press
Ann Arbor, Michigan*